26-003710US SEQ LISTING.TXT

SEQUENCE LISTING

<110> Palese, Peter
      Garcia-Sastre, Adolfo

<120> RECOMBINANT NEGATIVE STRAND RNA VIRUS
   EXPRESSION SYSTEMS AND VACCINES

<130> 7682-048

<140> 09/396,539
<141> 1999-09-14

<150> 09/106,377
<151> 1998-06-29

<150> 08/252,508
<151> 1994-06-01

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Gln Leu Val Trp Met Ala Cys Asn Ser Ala Ala Phe Glu Asp Leu Arg
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Val Leu Ser

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<211> 16
<212> PRT
<213> Influenza virus

<220>
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Thr Tyr Gln Arg Thr Arg Gln Leu Val Arg Leu Thr Gly Met Asp Pro
 1   5   10   15

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<400> 4
gaagcttaat acgactcact ataagtagaa acaagggtgt tttttcatat catttaaact 60
tcaccctgct tttgctgaat tcattcttct gcagg                            95

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<220>
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<400> 5
gaagcttaat acgactcact ataagcaaaa gcagggtgaa gtttaaatga tatgaaaaaa 60
caccccttgtt tctactgaat tcattcttct gcagg                           95

<210> 6
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<400> 6
agcttaatac gactcactat aagatctatt aaacttcacc ctgcttttgc tgaattcatt 60
cttctgca                                                          68

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gaagaatgaa ttcagcaaaa gcagggtgaa gtttaataga tcttatagtg agtcgtatta 60

<210> 8
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<220>
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<400> 8
ccgaattctt aatacgactc actataagta gaaacaaggg tg                    42

<210> 9
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cctctagacg ctcgagagca aaagcaggtg   30

<210> 10
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<220>
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<400> 19
cacccuuguu ucuacu   16

<210> 20
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<212> DNA
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<400> 20
ctagacgccc tgcagcaaaa gcagggtgac aaagacataa tggagaaaaa aatcactggg 60
tataccaccg ttgatatatc ccaatcgcat cgtaaa   96

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coding sequence of the CAT gene

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gttctttacg atgcgattgg gatatatcaa cggtggtata cccagtgatt tttttctcca 60
ttatgtcttt gtcaccctgc ttttgctgca gggcgt   96

<210> 22
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<212> DNA
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coding sequence of the CAT gene

<400> 22
actgcgatga gtggcagggc ggggcgtaat agat   34

<210> 23
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<220>
<223> Primer for construction of plasmid pIVACAT1

<400> 23
ctagatctat tacgccccgc cctgccactc atcgcagt   38

<210> 24
<211> 34
<212> DNA
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<220>
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<400> 24
actgcgatga gtggcagggc ggggcgtaat agat   34

<210> 25
<211> 38
<212> DNA
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<220>
<223> Primer for generating flanking sequences of NS RNA to fuse with the
coding sequence of the CAT gene

<400> 25
ctagatctat tacgccccgc cctgccactc atcgcagt   38

<210> 26
<211> 97
<212> DNA

<213> Artificial Sequence

<220>
<223> Primer for construction of plasmid pIVACAT1

<400> 26
ctagacgccc tgcagcaaaa gcagggtgac aaagacataa tggagaaaaa aaatcactgg 60
gtataccacc gttgatatat cccaatcgca tcgtaaa   97

<210> 27
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<220>
<223> Primer for construction of plasmid pIVACAT1

<400> 27
gttctttacg atgcgattgg gatatatcaa cggtggtata cccagtgatt ttttctcca 60
ttatgtcttt gtcaccctgc ttttgctgca gggcgt   96

<210> 28
<211> 30
<212> DNA
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<220>
<223> Primer for construction of pT3NAv

<400> 28
cggaattctc ttcgagcgaa agcaggagtt   30

<210> 29
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3NAv mut 2

<400> 29
catgggtgag tttcgaccaa aatctagatt ataaaatagg atacatatgc a   51

<210> 30
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 30
catgggtgag tttcgaccaa aatctagatt ataaaatagg atacatatgc a   51

<210> 31
<211> 43
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3NAv mut 2

<400> 31

aatgtatcct attttataat ctagattttg gtcgaaactc acc   43

<210> 32
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3NA/BIP

<400> 32
ggccactagt aggtcgacgc cggc   24

<210> 33
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3NA/BIP

<400> 33
gcgctggcca tcttgccagc ca   22

<210> 34
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3NA/BIP-CAT

<400> 34
agaaaaaaat cactggg   17

<210> 35
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3NA/BIP-CAT

<400> 35
ttacgccccg ccctgcc   17

<210> 36
<211> 23
<212> DNA
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<220>
<223> Primer for construction of pT3BIP-NA

<400> 36
gcgcatcgat aggtcgacgc cgg   23

<210> 37
<211> 55
<212> DNA
<213> Artificial Sequence

<220>

<223> Primer for construction of pT3BIP-NA

<400> 37
ggccatcgat ccaatggtta ttattttctg gtttggattc atcttgccag ttggg   55

<210> 38
<211> 91
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3GP2/BIP-NA (L-primer)

<400> 38
atgactggat ccgctagcat ggccatcatt tatctcattc tcctgttcac agcagtgaga 60
ggggaccaga tagaagaatc gcaaaaccag c   91

<210> 39
<211> 39
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3GP2/BIP-NA (M-primer)

<400> 39
atgacagaat cgtcgactt atctattcac tacagaaag   39

<210> 40
<211> 53
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3GP2/BIP-NA

<400> 40
gcgcgaagac gcagcaaaag caggagttta agctagcatg gccatcattt atc   53

<210> 41
<211> 38
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3HGP2/BIP-NA

<400> 41
cgatggatcc gctagcttgg aatcgatggg ggtgtatc   38

<210> 42
<211> 37
<212> DNA
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<220>
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<400> 42
atcgatgaat cgtcgactc agatgcatat tctgcac   37

<210> 43
<211> 51

<212> DNA
<213> Artificial Sequence

<220>
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<400> 43
atgactgtcg acccatggaa gtcaatcgat gttatgttaa accaattcca c   51

<210> 44
<211> 28
<212> DNA
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<400> 44
gcgcgaattc tcttcgagca aaagcagg   28

<210> 45
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<220>
<223> Position 243-226 of the NA gene

<400> 45
agagatgaat tgccggtt   18

<210> 46
<211> 6
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<400> 46
Glu Leu Asp Lys Trp Ala
 1   5

<210> 47
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<220>
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<400> 47
ccugcuuuyg cu   12

<210> 48
<211> 22
<212> RNA
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<400> 48
aguagaaaca aggguguuuu uu   22

<210> 49
<211> 52
<212> RNA

<213> Influenza A virus

<400> 49
aguagaaaca aggguguuuu uucauaucau uuaacuucac ccugcuuuug cu   52

<210> 50
<211> 53
<212> RNA
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<400> 50
agcaaaagca gggugaaguu uaaaugauau gaaaaaacac ccuuguuucu acu   53

<210> 51
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<400> 51
agaucuauua aacuucaccc ugcuuuugcu   30

<210> 52
<211> 43
<212> RNA
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<220>
<223> Primer for generate mutagenesis sequence within viral gene segments

<400> 52
aguagaaaca aggguguuuu uucagaucua uuacgccccg ccc   43

<210> 53
<211> 15
<212> RNA
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<220>
<223> Primer for construction of WSN NA gene in pT3NAv plasmid

<400> 53
aguagaaaca aggag   15

<210> 54
<211> 14
<212> RNA
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<223> Primer for construction of WSN NA gene in pT3NAv plasmid

<400> 54
aguagaaaca agag   14

<210> 55
<211> 12
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<213> Artificial Sequence

<220>
<223> Primer for construction of WSN NA gene in pT3NAv plasmid

<400> 55

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<210> 56
<211> 53
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<220>
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<400> 56
ccatgggtga gtttcgacca aaatctagat tataaaatag gatacatatg cag   53

<210> 57
<211> 15
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<220>
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<400> 57
cctgcagaag aatga   15

<210> 58
<211> 55
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<220>
<223> Primer for generate mutagenesis sequence within viral gene segments

<400> 58
gugguauacc cagugauuuu uuucuccauu augucuuugu cacccugcuu uugcu   55

<210> 59
<211> 53
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<220>
<223> Primer for construction of WSN NA gene in pT3NAv plasmid

<400> 59
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<210> 60
<211> 12
<212> RNA
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<220>
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<400> 60
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<210> 61
<211> 53
<212> RNA
<213> Artificial Sequence

<220>

<223> Primer for construction of WSN NA gene in pT3NAv plasmid

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<210> 62
<211> 96
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 62
ctagacgccc tgcagcaaaa gcagggtgac aaagacataa tggagaaaaa aatcactggg 60
tataccaccg ttgatatatc ccaatcgcat cgtaaa   96

<210> 63
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for construction of pT3NAv

<400> 63
ccaagcttat taaccctcac taaaagtaga aacaaggagt tt   42